

## REMARKS

Claims 1-25 are pending in this application, all of which stand finally rejected. Claims 1-25 have been rejected under 35 U.S.C. § 101. Claims 1, 10, 13, 18, 21, and 24 have been rejected under 35 U.S.C. § 112, first paragraph. Claims 1-6, 8-12, 14-23, and 25 have been rejected until 35 U.S.C. § 102(b) as being anticipated by the Tittel Non-Patent Literature provided by the Examiner. Claims 7, 13, and 24 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Tittel in view of U.S. Patent No. 6,667,700 (McCanne). Following entry of the amendment, claims 1-15, 18-21, and 24 will have been amended, and claims 26-28 will have been added.

### Drawing and Specification Objections

The Examiner has indicated that the amendments previously filed have addressed the objection to the drawings and specification. Applicants will thus assume that the drawings are now acceptable, and that no new drawings need to be filed.

### The Section 101 Rejection

As to the first section 101 issue (paragraph 9 of the Office Action), claims 1-9 and 18-20 have been amended to recite that the medium is a storage medium. This amendment is supported at least by paragraph 0023 of the original disclosure, and no new matter is introduced. Since the amendment takes claims 1-9 and 18-20 out of the realm of intangible signals, this amendment removes the “signal” issue that has been raised with respect to these claims under section 101.

Turning now to the second section 101 issue (paragraph 11), applicants respectfully disagree with the Examiner, and request that the Examiner reconsider this rejection for the following reasons.

First, it should be noted that the Examiner has not met the Office’s burden for a rejection based on lack of utility. As explained in MPEP 2107.02, in order to reject a claim for lack of utility under section 101, the Office must:

- (A) make a *prima facie* showing that the claimed invention lacks utility, and (B) provide a sufficient evidentiary basis for

factual assumptions relied upon in establishing the *prima facie* showing. ...

... Whenever possible, the examiner should provide documentary evidence ... to support the factual basis for the *prima facie* showing of no specific and substantial credible utility. If documentary evidence is not available, the examiner should specifically explain the scientific basis for his or her factual conclusions.

The Office Action contains no documentary evidence to support the Examiner's assertion that the claimed invention lacks substantial utility. Nor does the Examiner, in lieu of such documentary evidence, set forth a *scientific basis* for his conclusion. Thus, the section 101 rejection amounts to nothing more than the Examiner's unsupported assertion that validation of a message is not useful.

Although the Examiner has not met the burden required for a section 101 rejection, applicants have nevertheless explained a utility of the subject matter recited in the claims. As explained in the paper filed by applicants on June 12, 2006, one type of message that can be validated by the claimed subject matter is a postal address. That is, some addresses are real addresses (e.g., "Redmond, WA 98052"), while some addresses look valid but contain substantive errors that make them unintelligible (e.g., "Redmond, WA 19103", which contains a verbal description of a place in the Pacific Northwest, but contains the numeric zip code of a city in the Northeastern United States). Validating data such as addresses in order to prevent mis-addressed letters is a useful endeavor.

While the claims are not limited to checking postal addresses, the Examiner has not identified any example of the invention that lacks utility. Applicants note that syntactic and semantic analysis has its own classification under the U.S. patent system (see classification 717/143). Semantic and syntactic analysis essentially means determining whether a message comports with some set of syntactic and semantic rules (i.e., whether the message is valid under such a set of rules). It is unclear why this topic would be given its own category under the U.S. patent system if it *per se* lacks utility. It is self-evident that evaluating data to determine whether input data is valid under some set of rules is useful in the computing arts.

In any event, if the Examiner believes that validating data has no utility, then applicants request that the Examiner substantiate this position with documentary or scientific evidence, as the PTO's rules require in MPEP 2107.02, so that applicants can have an opportunity to evaluate and address this position.

Applicants submit that the Examiner has not met the Office's burden to establish a lack of utility. Applicants request that the Examiner withdraw the section 101 rejection of claims 1-25; or, if the Examiner maintains the section 101 rejection, applicants request that the Examiner set forth a *prima facie* case for lack of utility as required in MPEP 2107.02. Specifically, applicants request that the Examiner provide either documentary evidence, or an explanation of the relevant scientific principle, as required by MPEP 2107.02.

#### The Section 112, First Paragraph Rejections

Applicants submit that the claim amendments submitted in the prior amendment paper, as well as the amendments presented in this paper, are amply supported by the original disclosure. In particular, paragraph 0040 of the application states:

For example, as described above in connection with FIGS. 2 and 3, a message may contain an address, which may specify city = "Redmond," state = "Washington," and zip = "98052." This information is syntactically valid (i.e., including a city, state, and zip code is the correct syntax for an address in the United States), and it is also substantively valid (i.e., 98052 is, in fact, the correct zip code for Redmond, Washington). It should be noted, however, that *there is no way to determine from the syntax of an address whether the address is substantively valid.* or example, "Redmond, Washington 19103" is a syntactically valid address, but not a substantively valid address, since 19103 is the zip code for Philadelphia, Pennsylvania, not Redmond, Washington.

Application, paragraph 0040 (italics added). Whether a given piece of text content refers to a real address is an example of a condition whose truth is no assessable solely from the

message's syntax, and applicants note that the italicized language is almost exactly the language that was added to claims 1, 10, 18, and 21. In particular:

- Claim 1 has now been amended to recite "wherein at least one of said first delegate or said second delegate determines whether the content of the element to which it is applied is valid based on at least one non-syntactic condition of the corresponding content."
- Claim 10 has now been amended to recite "wherein at least one of the validation delegates determines whether the content of the element with which it is executed is valid based on at least one non-syntactic condition of the content of the element"
- Claim 18 was amended to recite "wherein the first delegate determines whether the element that it is called upon to validate is valid based on at least one non-syntactic condition of the content that corresponds to that element"
- Claim 21 was amended to recite "wherein at least one of the plurality of delegates determines whether the element with it is executed is valid based on at least one non-syntactic condition"

The italicized language in the block quotation above clearly shows the feature where the validation is based on a non-syntactic condition. Moreover, the fact that the validation is performed by delegates is shown in paragraphs 0042, 0047, and 0049-0053. It is clear from the disclosure that the validation is performed by delegates, and thus, in order to simplify consideration of this case and to focus the Examiner's attention, applicants did not cite paragraphs 0042, 0047, and 0049-0053 in the last response, but request that the Examiner consider those paragraphs now.

Additionally, applicants note that satisfaction of the written description requirement does not require that the amendment be describe "literally" or "*in haec verba.*" (MPEP 2163.02). Rather, the test is:

... whether the disclosure of the application relied upon  
"reasonably conveys to the artisan that the inventor had  
possession at that time of the later claimed subject matter."

(MPEP 2163.02). The amendment to claims 1, 10, 18, and 21 does, in fact, very closely tracks the language cited – particularly the italicized language above from paragraph 0040 – and it is also clear that from the cited portions (and from the specification as a whole) that this case includes subject matter in which a system uses delegates to assess validity in cases where such validity is based on a non-syntactic condition. Thus, it is clear that the amendments are supported.

Claims 13 and 24 have been amended, which renders moot the section 112, first paragraph rejection of those claims. The amendment to claims 13 and 24 does not constitute new matter, and is supported by the entire specification, but at least by paragraphs 0045 and 0052.

#### The Section 102 Rejection of the Independent Claims

The Tittel reference does not teach or suggest that a message is validated based on a non-syntactic condition. Applicant have amended the independent claims (1, 10, 18, and 21) to more particularly point out this feature.

As explained in applicant's prior response, Tittel's DTD defines only the *syntax* of a document. Since each of the independent claims calls for validity to be determined based on a non-syntactic condition, Tittel's DTD does not teach or suggest this aspect of the independent claims.

Moreover, the Examiner's reliance on the database shown in page 14 of Tittel does not cure this deficiency, because the database is used as an example of an import source or export target. In particular, page 14 of Tittel explains that a database might be the source of some data that needs to be imported into a spreadsheet, or editor, or internet software, and that XML can be used as an intermediate format for exchanging data between such entities. However, the Examiner proposes an extension of Tittel's database that goes far beyond what is stated, or even suggested, in the applied portion. In particular, the Examiner states:

Tittel discloses data drawn from a database in Figure 1.1 on page 14. It is well known for databases to have lookup or reference tables for validating data relationships between data sets to establish truth or context validity. A database lookup table validates the relationship between the book author

and book title (from the example in the preceding paragraph) so that only true author title data relationships are validated.

The problem with this explanation is that it asserts several things about Tittel's database that are found nowhere in the applied portion of Tittel.

First, there is no mention in the applied portion of Tittel that the database has a "lookup table for validating data relationships between data sets to establish truth or context validity." It is unclear whether databases have such lookup tables or not. It is further unclear what body of knowledge the Examiner is drawing upon for this assertion. Moreover, there is absolutely no mention in Tittel that the database shown on page 14 "validates the relationship between book author and book title." This assertion appears to be based entirely on supposition about what the database lookup table would (or might) do, if the database shown in Tittel had a lookup table (and the applied portion of Tittel does not show any such lookup table).

If there is a reference showing a database lookup table, and if the Examiner believes that such a reference is combinable with Tittel under section 103, then applicants request that the Examiner identify the reference in question and explain why it is combinable with Tittel in a new Office Action so that applicants can have a meaningful opportunity to respond. At present, independent claims 1, 10, 18, and 21 are rejected for anticipation under section 102. An anticipation rejection requires that every feature of a claim be identically taught in the reference. It is clear that Tittel does not teach, or even suggest, claim 1's feature of "wherein at least one of said first delegate and said second delegate determines whether the element to which it is applied is valid based on at least one condition whose truth is not assessable solely from the message's syntax" (or the related features of claims 10, 18, and 21). The Examiner's supposition about the lookup table that some databases might contain, or how such a lookup table could be used to validate certain data, is not a sufficient showing to find anticipation of a claim.

Moreover, although the delegates of the claimed subject matter are perhaps most useful for determining non-syntactic validity (i.e., validity beyond schema compliance), the aim of the claimed subject matter is to allow arbitrary validation delegates. In other words, the nature of the validation is less important than the idea of an engine that can select and

execute validation delegates. Claim 1, as amended, more particularly points out that delegates are executed with the content of the elements. The Examiner compares delegates to Tittel's rules, but Tittel's rules are not executed; rather, they are parsed and applied by a monolithic validation engine that determines compliance with a schema.

For at least these reasons, applicants submit that the claims, as amended, are patentably distinct from Tittel, and request that the Examiner reconsider and withdraw the section 102 rejection of the claims.

#### Dependent Claims

The independent claims have been shown to be patentable, and the dependent claims are patentable at least by reason of their dependency.

#### No New Matter

The amendments to the claims do not introduce new matter.

The amendments related to execution of delegates with elements is supported at least by paragraphs 0021 and 0042.

The amendments relating to determining whether content in an element is valid is supported at least by paragraph 0029.

The amendments relating to text content structured into elements that comprise markup and content is supported at least by paragraph 0030.

The amendments relating to the determination of validity based on a non-syntactic condition is supported at least by paragraph 0040.

Certain amendments conform the language of dependent claims to the amendments of their base claims, and such amendments do not introduce new matter.

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**PATENT**  
**REPLY FILED UNDER EXPEDITED**  
**PROCEDURE PURSUANT TO**  
**37 CFR § 1.116**

Conclusion

For all of the foregoing reasons, applicants request that the Examiner reconsider the final rejection and allow this case.

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